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Fuel Focus

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

Issue 22, Volume 8

November 15, 2013

Canada

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National Overview

Canadian Retail Gasoline Prices Decreased 1 Cent per Litre from Last Week

After a three-week decline, the national average retail gasoline price for the week ending November 12, 2013, settled at $1.23 per litre. This represents a decrease of more than 1 cent per litre from the previous week, reflecting lower North American wholesale gasoline prices and, in turn, lower world crude oil prices. Overall, pump prices are almost at the same level compared to the same period in 2012.

Diesel fuel remained unchanged at $1.30 per litre, while furnace oil rose by 1 cent per litre from the previous week. Prices for diesel are 6 cents per litre higher than they were at this time last year, while furnace oil prices are 1 cent per litre lower than last year.

For the week ending November 8, 2013, crude oil prices for Edmonton Par, West Texas Intermediate and Brent fell by amounts ranging from of $25/m^3 and $32/m^3 (US$4 and US$5 per barrel) compared to the previous week.

Recent Developments

- **Domestic Crude Oil Production**: Canadian production of crude oil and equivalent hydrocarbons increased by 7% in July 2013 compared to the same period last year to 16.9 million cubic meters. Exports increased by 1% to 12 million cubic meters. Imports decreased 26% to 3 million cubic meters. About 69% of Canada's total domestic production went to the export market compared to 73% a year earlier. (Statistics Canada, The Daily, http://www.statcan.gc.ca/daily-quotidien/131028/dq131028b-eng.htm)
- **Kitimat Refinery Developer Seeks Loan Guarantee**: British Columbia-based newspaper mogul David Black hopes to convince the Canadian government to provide an $8-billion loan guarantee to help finance the proposed $26 billion, Kitimat oil refinery project. (Source: Global Refining & Fuels Report)
- **Brazil to Become a Major Global Oil Producer**: According to the International Energy Agency's 2013 World Energy Outlook, Brazil is set to become a net oil exporter and top 10 producer from 2015. Brazil's offshore discoveries could play a central role in meeting the world's oil needs through to 2035, accounting for one-third of the net growth in global supply. (Source: Daily Oil Bulletin)

Figure 1: Crude Oil and Regular Gasoline Price Comparison (National Average)

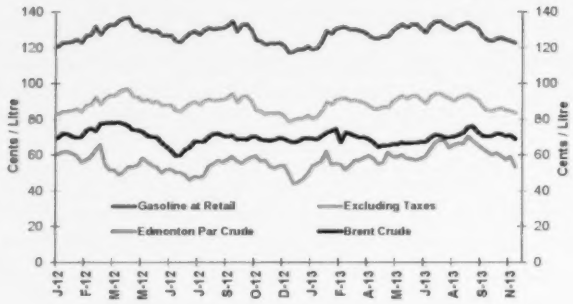
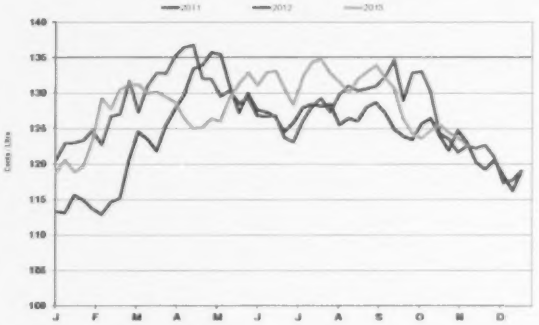


Figure 2: Weekly Regular Gasoline Prices



Changes in Fuel Prices

	Week of:	Change from:	
¢/L	2013-11-12	Previous Week	Last Year
Gasoline	122.6	-1.2	+0.1
Diesel	129.5	0.0	+6.5
Furnace Oil	118.4	+1.0	-0.9

Source: NRCan

Natural Gas Prices for Vehicles

2013-11-12	¢/kilogram	¢/L gasoline equivalent	¢/L diesel equivalent
Vancouver	119.4	78.8	81.7
Edmonton	115.1	75.9	78.7
Toronto	110.6	73.0	75.6

Source: ¢/kg Kent Marketing Services Limited

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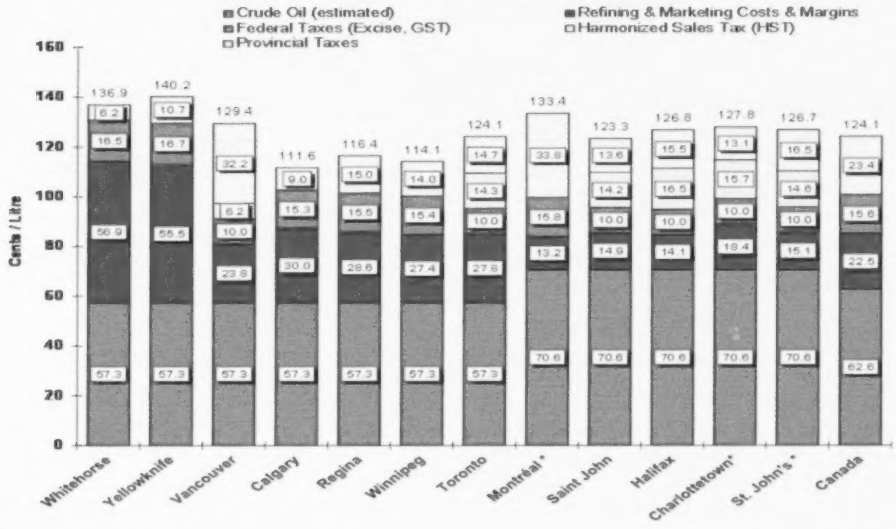
Retail Gasoline Overview

For the period ending November 12, 2013, the **four-week average** regular gasoline pump price in selected cities across Canada was $1.24 per litre, a decrease of less than 1 cent per litre compared to the previous report of November 1, 2013. Compared to the same period in 2012, the average Canadian pump price is 1 cent per litre higher.

The **four-week average** crude component was 63 cents per litre, a decrease of 2 cents compared to two weeks ago. Retail gasoline prices in selected Western cities (Vancouver to Winnipeg) ranged from $1.12 to $1.29 per litre. Compared to two weeks ago, prices have decreased on average by 1 cent per litre. Comparatively, prices in Eastern cities (Toronto to St. John's) ranged from $1.23 to $1.33 per litre, and most Eastern cities observed a price decrease on average of less than 1 cent per litre.

At the national level, refining and marketing costs and margins ended at 23 cents per litre, up 1 cent per litre from the previous report two weeks ago. This is 0.1 cent per litre lower than at this time last year.

Figure 3: Regular Gasoline Pump Prices in Selected Cities Four-Week Average (October 22 to November 12, 2013)



Source: NRCan

** Regulated Markets*

Average Government Revenues from 2007 to 2011

A large portion of the profits generated from oil and gas operations in Canada are reinvested by producers into exploration and development which contributes to the growth of the Canadian economy. Rising commodity prices have also benefitted government revenues. The largest share of government revenues collected from upstream oil and gas industry averaged about $22 billion over the last five years. The average direct revenues from energy industries received by the federal and provincial/territorial governments in Canada in 2007 to 2011 were as follows:

- Corporate income tax, which is levied on corporations operating in Canada: $6.7 billion
- Indirect taxes, such as sales and payroll taxes : $2.4 billion
- Crown royalties, which are the share of the value of oil and gas extracted that is paid to the Crown as the resource owner: $13.3 billion
- Crown land sales, which are paid to the Crown in order to acquire the mineral rights for specific properties : $4.2 billion
- Total revenues to governments were $26.6 billion.

Source: Natural Resources Canada, Energy Markets Fact Book 2013 - 2014

Wholesale Gasoline Prices

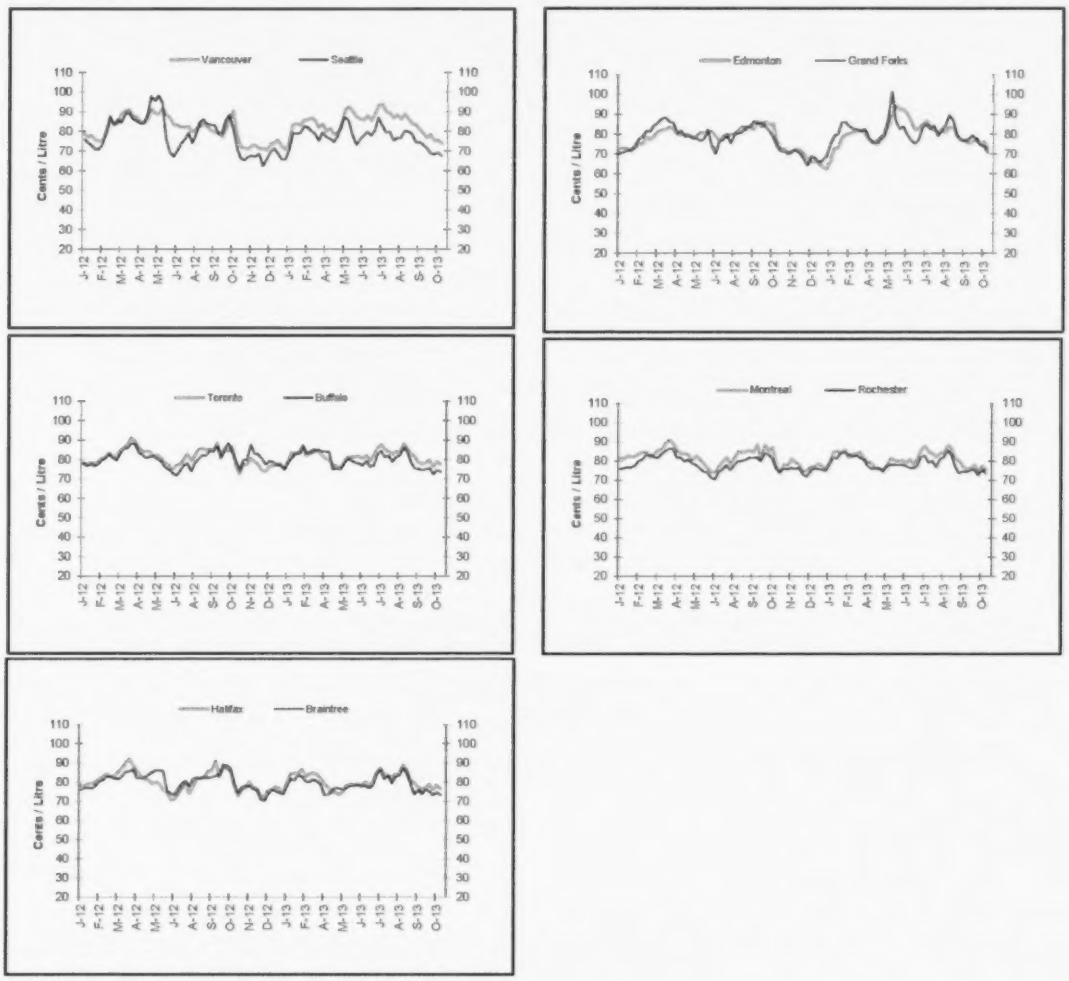
Wholesale gasoline prices declined in all selected Canadian and American cities in the range of 1 to 3 cents per litre for the week ending November 7, 2013.

Compared to last week, wholesale gasoline prices decreased from 1 to 2 cents per litre in selected Eastern centres. Prices ended between 73 and 78 cents per litre.

In Western centres, the wholesale price of gasoline ranged from 68 to 74 cents per litre, and price changes ranged from a decrease of 2 to 3 cents per litre compared to the previous week.

Compared to this time last year, wholesale price changes in both Canadian and American centres ranged from a decrease of 6 cents per litre to an increase of 3 cents per litre.

Figure 4: Wholesale Gasoline Prices
Rack Terminal Prices for Selected Canadian and American Cities Ending November 7, 2013
(CAN ¢/L)



Sources: NRCan, Bloomberg Oil Buyers Guide

Gasoline Refining and Marketing Margins

Four-week rolling averages are used for gasoline refining and marketing margins.

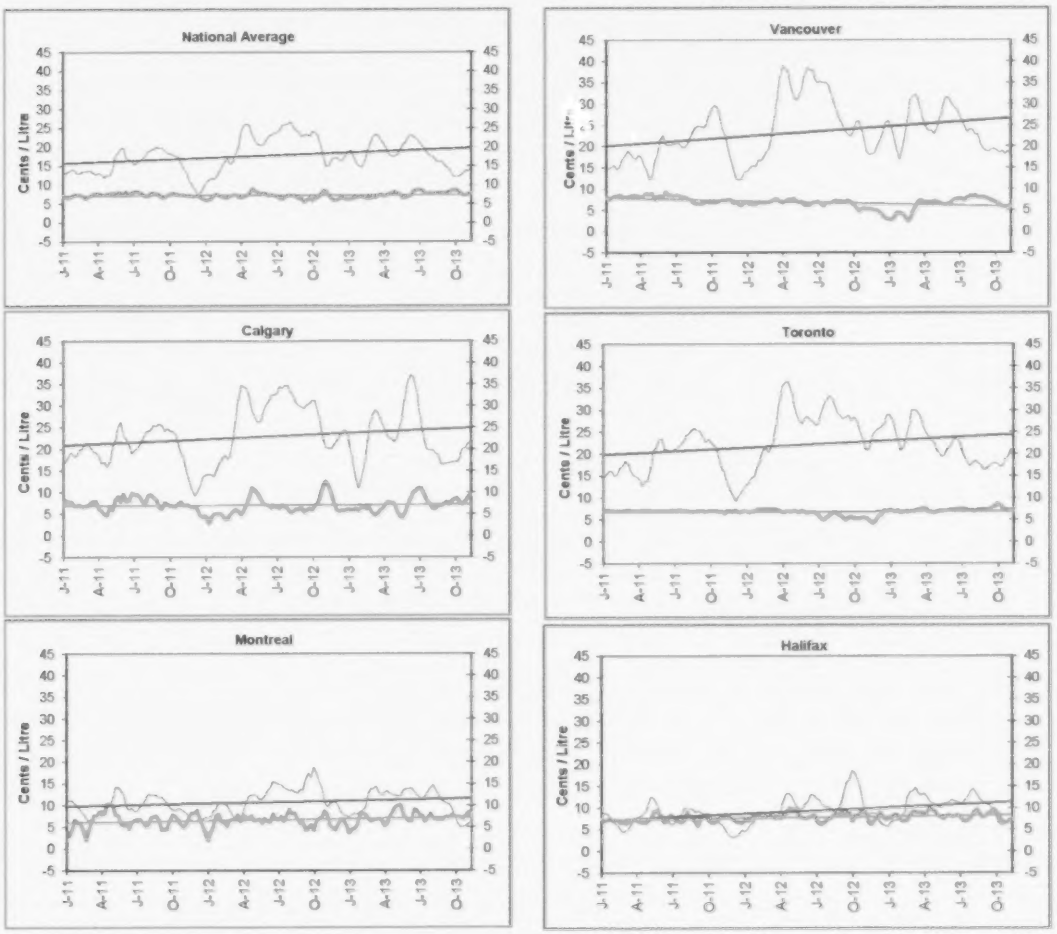
Compared to two weeks ago, refining margins in most selected markets rose on average by less than 1 cent per litre to 14 cents per litre, compared to the previous week. Across Canada, refining margins ranged from 6 to 21 cents per litre.

The recent upward movement is in part due to the decline in the Edmonton Par crude price which is used in our methodology to calculate the refining margins.

As shown in Figure 6, Edmonton Par has dropped more significantly than WTI and Brent. Because wholesale gasoline prices in Canada are influenced by the North American markets, they have not dropped as significantly as crude prices. As a result, refining margins increased.

The marketing margin is the difference between the pump price (excluding taxes) and the price paid by the retailer to purchase the gasoline. Marketing margins for the five selected centres ranged between 7 and 10 cents per litre.

Figure 5: Gasoline Refining and Marketing Margins
Four-Week Rolling Average Ending November 12, 2013
------- Refining Margin ——— Marketing Margin



Source: NRCan

Crude Oil Overview

Global Crude Oil Prices Pushed Downward

For the week ending November 8, 2013, prices for the three marker crudes averaged between $554/m^3$ and $690/m^3$ (US$84 to US$105 per barrel).

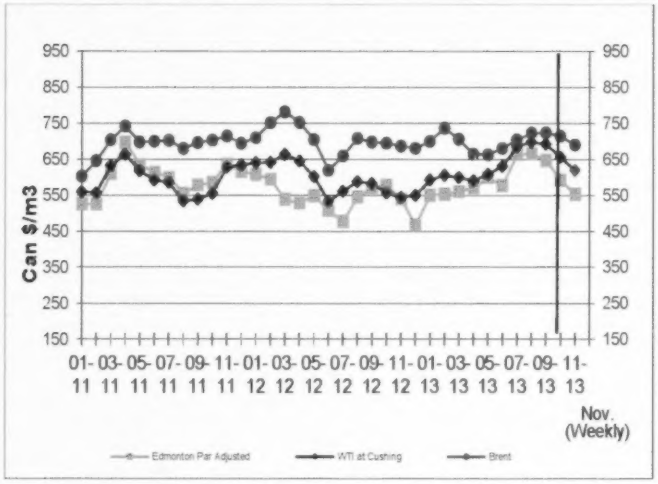
Compared to the previous week, all three crude oil price benchmarks fell in the range of $25/m^3$ and $32/m^3$ (US$4 and US$5 per barrel). WTI prices dropped the most by $32/m^3$ (US$5 per barrel) while Edmonton Par and Brent by $23/m^3$ and $27/m^3$ (US$3.75 and US$4 per barrel), respectively. The crude oil price differential between Edmonton Par and WTI has been widening in October mainly due to high supply and pipeline congestion which put downward pressure on prices.

Compared to this time last year, prices for all three marker crudes are up in the range of $10/m^3$ to $80/m^3$ (US$-3 and US$+8 per barrel). Canadian crude oil prices remain significantly cheaper than imported global crudes. Currently, Edmonton Par is $137/m^3$ (US$21 per barrel) less than Brent.

The WTI crude oil prices remain depressed compared to Brent prices as U.S. crude oil inventories remain high, while a number of refineries are undergoing scheduled and un-scheduled maintenance, pushing down the demand for crude oil.

The Supplement on page 6 gives more details on crude oil price differentials with respect to similar types of crude oil sold on world energy markets.

Figure 6: Crude Oil Price Comparisons



Changes in Crude Oil Prices

Crude Oil Types	Week Ending: 2013-11-08		Change From:			
			Previous Week		Last Year	
	$Can/$ m^3	$US/ bbl	$Can/$ m^3	$US/ bbl	$Can/$ m^3	$US/ bbl
Edmonton Par	553.54	84.29	-26.90	-4.07	+12.57	-1.96
WTI	619.49	94.32	-31.59	-4.80	+80.08	+8.33
Brent	690.15	105.08	-24.71	-3.75	+9.83	-3.38

Source: NRCan

Changing Patterns In Crude Oil and Product Shipments

The pattern of crude oil and petroleum product shipments between the Gulf Coast and Midwest is changing. Much of the increase in onshore crude oil production is in the upper Midwest and Rocky Mountain regions, particularly the Bakken formation in North Dakota. Pipeline capacity to move this crude oil to the major refining centers on the Gulf Coast has, at times, lagged the production increases, leading to discounted pricing for crude oil in the Midcontinent.

The discounted crude pricing has encouraged U.S. refineries to increase utilization and has spurred investment in new distribution infrastructure that will alleviate the bottleneck. The new infrastructure includes new pipelines, as well as expansions and direction reversals of existing lines, and even repurposing of pipelines to transport different hydrocarbons. As a result, Midwestern refiners are bringing less crude oil north from the Gulf Coast and are supplying more refined petroleum products from within the region. Conversely, crude oil shipments to the Gulf Coast region from the Midwest have increased.

Shifts in regional availability of crude oil and petroleum products combined with limited or fully utilized pipeline capacity have also prompted greater reliance on rail and waterborne transportation.

Source: U.S. Energy Information Administration, http://www.eia.gov/todayinenergy/detail.cfm?id=13611

Price Differentials for Similar Quality Light Crude Oils

The following article compares prices for light crude oils of similar quality, namely the Canadian Edmonton Par, the North American benchmark West Texas Intermediate (WTI) and the international waterborne Brent crude oil. The price of crude oil in different geographic markets has major implications for Canadian producer revenues, for Canadian economic growth and job creation, and for royalty and tax revenues to governments. Western Canadian light crude production in 2012, including synthetic oil, was about 0.25 million/m^3 per day (1.6 million barrels per day). Edmonton Par prices refer to the price of Canadian light crude at Edmonton; the WTI price refers to a U.S. light crude type delivered to Cushing Oklahoma; and Brent is a United Kingdom light crude delivered at the Sullom Voe terminal in Scotland.

Canadian light crudes are sold at prices heavily influenced by both Edmonton Par and WTI prices. In the past, the price at which Canadian light crude oil was sold was very similar to the prices of similar quality crudes sold globally. For example, in 2008, both Edmonton Par and Brent prices averaged \$616/m^3 (US\$98 per barrel). Over the January 2000 to December 2010 period, Brent crude oil prices averaged \$327/m^3 (US\$52 per barrel), while Edmonton Par prices also averaged US\$52 per barrel.

Since 2011, crude oil inventories at the main oil distribution hub in Cushing, Oklahoma have periodically swelled, reflecting high supplies coming into the U.S. Midwest (including oil from Alberta oil sands), and a lack of adequate pipeline capacity to take oil away from Cushing. The oil transportation constraints in Cushing, combined with supply disruptions in the Middle East and Africa, led to Brent being priced much higher than similar North American light crude oil (e.g., Edmonton Par and WTI).

In 2011, the Brent-Edmonton Par price differential averaged \$94/m^3 (US\$15 per barrel), and rose to an average of \$163/m^3 (US\$26 per barrel) in 2012. In the first quarter of 2013, the Brent-Edmonton Par price differential averaged \$157/m^3 (US\$25 per barrel), then fell to an average of only \$31/m^3 (US\$5 per barrel) in July 2013. As shown in the graph below, the narrowing of the oil price differentials was short-lived. Since July 2013, the Brent-Edmonton Par oil price differential has widened significantly. On October 30, 2013, the Brent-Edmonton Par oil price differential reached \$138/m^3 (US\$22 per barrel) – four times the size of the July 2013 differential.

Factors in the recent widening of Brent-Edmonton Par oil price differentials include:
- Insufficient pipeline capacity between Canada and the U.S. Midwest, and a shortage of cars to transport crude by rail;
- Insufficient access to tidewater for Canadian and U.S. crudes;
- Delays in obtaining U.S. approval to construct the north leg of the Keystone XL pipeline;
- Increasing supplies of crude in the U.S. Midwest, due to rising Canadian oil sands exports and growing U.S. tight light oil production;
- Concerns about the decline in North Sea oil production and the embargo of Iranian oil exports to Europe (raising Brent crude oil prices); and,
- Falling U.S. crude oil demand (due to improvements in energy efficiency, and growth in the use of oil substitutes (e.g. natural gas).

Crude Oil Price Comparisons
(Monthly average)